03040207-01

(Sampit River)

General Description

Watershed 03040207-01 (formerly 03040207-030) is located in Georgetown County and consists primarily of the ***Sampit River*** and its tributaries. The watershed occupies 105,260 acres of the Lower Coastal Plain and Coastal Zone regions of South Carolina. Land use/land cover in the watershed includes: 48.4% forested land, 19.8% forested wetland, 12.8% agricultural land, 8.7% scrub/shrub land, 5.0% urban land, 3.4% nonforested wetland, 1.6% water, and 0.3% barren land.

Bond Swamp (Boety Bay, Mackey Bay, Bind Bay, Canaan Bay, Ditch Branch, Canaan Branch, Summons Swamp) flows into Boggy Swamp (Cherryhill Swamp, Machine Branch, Britt Branch), which forms the Sampit River. The Sampit River accepts drainage from Spring Gully, Little Kilsock Bay, Ports Creek, Canaan Branch, Pennyroyal Creek (Big Kilsock Bay, Flat Bay, Turkey Creek), and Whites Creek before draining into Winyah Bay. There are a total of 166.1 stream miles, 819.8 acres of lake waters, and 1,033.5 acres of estuarine areas in this watershed. The upper reaches of the watershed, including Boggy Swamp and its tributaries are classified FW* (dissolved oxygen not less than 4.0 mg/l and pH between 5.0 and 8/5). The Sampit River is classified FW*/SB dependent on the freshwater inflow from its neighboring rivers (the Great Pee Dee and Waccamaw Rivers), and the remaining streams in the watershed are classified FW.

Surface Water Quality

Station #	Type	Class	Description
MD-075	P/W	SB/FW*	SAMPIT R. BETWEEN MOUTHS OF PORTS CREEK & PENNYROYAL CREEK
MD-076N	S/W	FW	TURKEY CREEK S-22-42 SW OF GEORGETOWN
MD-149	P/W	FW	WHITES CREEK 100 YDS UPSTREAM OF JUNCTION WITH SAMPIT RIVER
MD-077	P/INT	SB/FW*	SAMPIT RIVER AT US 17
MD-073	P/W	SB/FW*	SAMPIT RIVER OPPOSITE AMERICAN CYCNAMID CHEMICAL CO.
MD-074	S/W	SB/FW*	SAMPIT RIVER AT CHANNEL MARKER #30

Sampit River – There are four SCDHEC monitoring sites along the Sampit River, and recreational uses are supported at all sites. This is a tidally influenced system with limited flushing and significant marsh drainage characterized by naturally low pH and dissolved oxygen conditions. At the furthest upstream site ***(MD-075)***, aquatic life uses are not supported due to dissolved oxygen excursions, which are compounded by a significant decreasing trend in dissolved oxygen concentration. Although pH excursions occurred, they were typical of values seen in tidally influenced systems and were considered natural, not standards violations. A significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter.

At the next two sites downstream ***(MD-077, MD-073)***, aquatic life uses are partially supported due to dissolved oxygen excursions, which are compounded by a significant decreasing trend in dissolved oxygen concentration. Although pH excursions occurred, they were typical of values seen in tidally influenced systems and were considered natural, not standards violations. Significant decreasing trends in five-day biochemical oxygen demand and total nitrogen concentration suggest improving conditions for these parameters. At the furthest downstream site

(MD-074), aquatic life uses are fully supported. Although pH and dissolved oxygen excursions occurred, they were typical of values seen in tidally influenced systems and were considered natural, not standards violations. A significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter.

Turkey Creek (MD-076N) –Aquatic life uses are not supported due to pH excursions. There is also a significant increasing trend in five-day biochemical oxygen demand. This is a tidally influenced system with limited flushing and significant marsh drainage characterized by naturally low dissolved oxygen conditions. Although dissolved oxygen excursions occurred, they were typical of values seen in blackwater systems and tidally influenced systems with significant marsh drainage and were considered natural, not standards violations. There is a significant decreasing trend in pH. Recreational uses are fully supported and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

Whites Creek (MD-149) – This is a tidally influenced system with limited flushing and significant marsh drainage characterized by naturally low pH conditions. Aquatic life uses are not supported due to dissolved oxygen excursions and occurrences of copper in excess of the aquatic life acute criterion, which are compounded by a significant decreasing trend in dissolved oxygen concentration. There is also a significant increasing trend in turbidity. Although pH excursions occurred, they were typical of values seen in tidally influenced systems and were considered natural, not standards violations. A significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter. Recreational uses are fully supported.

A fish consumption advisory has been issued by the Department for mercury and includes the ***Sampit River*** *within this watershed (see advisory p.130).*

NPDES Program

Active NPDES Facilities

RECEIVING STREAM ***FACILITY NAME*** ***PERMITTED FLOW @ PIPE (MGD)***	***NPDES#*** ***TYPE*** ***COMMENT***
SAMPIT RIVER INTERNATIONAL PAPER CO./GEORGETOWN PIPE #: 001 FLOW: 27.4	SC0000868 MAJOR INDUSTRIAL
SAMPIT RIVER 3V, INC. PIPE #: 001 FLOW: 4.621	SC0036111 MAJOR INDUSTRIAL
SAMPIT RIVER CITY OF GEORGETOWN WWTP PIPE #: 001 FLOW: 12.0	SC0040029 MAJOR DOMESTIC
SAMPIT RIVER CITY OF GEORGETOWN/WTP PIPE #: 001 FLOW: M/R	SCG645013 MINOR INDUSTRIAL

SAMPIT RIVER ISG GEORGETOWN INC. PIPE #: 001 FLOW: 0.629 PIPE #: 002 FLOW: 0.21	SC0001431 MAJOR INDUSTRIAL
TURKEY CREEK SCPSA/WINYAH STEAM STATION PIPE #: 001 FLOW: M/R	SC0022471 MAJOR INDUSTRIAL
TURKEY CREEK TRIBUTARY INTERNATIONAL PAPER CO./SANTEE PIPE #: 001 FLOW: M/R	SC0042960 MINOR INDUSTRIAL
WHITES CREEK CWS/WHITES CREEK-LINCOLNSHIRE SD PIPE #: 001 FLOW: 0.125	SC0030732 MINOR DOMESTIC

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

LANDFILL NAME ***FACILITY TYPE***	***PERMIT #*** ***STATUS***
INTERNATIONAL PAPER, INC. LANDFILL INDUSTRIAL	222435-1601 ACTIVE
INTERNATIONAL PAPER, INC. INDUSTRIAL	---------- INACTIVE
STONE MANUFACTURING CO. INDUSTRIAL	---------- INACTIVE
GEORGETOWN STEEL CORPORATION INDUSTRIAL	---------- INACTIVE
INTERNATIONAL PAPER, INC. LANDFILL LAND APPLICATION	222654-8001 ACTIVE
INTERNATIONAL PAPER, INC. LANDFILL LAND APPLICATION	222654-8002 ACTIVE
FRASIER COMPOSTING SITE COMPOSTING	222679-3001 ACTIVE
HAMMOND WOOD RECYCLING #3 COMPOSTING	222660-3001 INACTIVE
MCKENZIE WOOD CHIPPING COMPOSTING	222732-3001 ACTIVE
MILLER WOOD PROCESSING FACILITY COMPOSTING	222763-3001 ACTIVE
AMERICAN CYANAMID INDUSTRIAL	IWP-070 INACTIVE

Mining Activities

MINING COMPANY *MINE NAME*	*PERMIT #* *MINERAL*
STONE CONSTRUCTION CO. SAMPIT MINE	1639-43 SAND
RICHARDSON CONSTRUCTION CO. HARMONY TOWNSHIP LAKES 1&2	1655-43 SAND

Water Quantity

Portions of this watershed fall within the Waccamaw Capacity Use Area and large groundwater uses must be reported (see Capacity Use Program p.27).

Growth Potential

There is a moderate to high potential for growth in this watershed, which contains the City of Georgetown and is adjacent to the Town of Andrews. Water and sewer infrastructure are located in and immediately around these municipalities, and also southeast of Georgetown, which supports an industrial area. The U.S. 521 corridor between Andrews and Georgetown is forecasted to be widened to four lanes and would increase the potential for growth. There are currently five industrial areas in the watershed, one south of Andrews and four located in or near the City of Georgetown. Based on the location of facilities and infrastructure required by many industries (a shipping port, rail lines, commercial air service, highway access, and water and sewer infrastructure), the eastern edge of the watershed has the potential for significant industrial growth. Outside these areas, the watershed is rural with agricultural uses and timberlands.